

Application No. 10/081,885  
Amendment dated November 3, 2003  
Reply to Office Action of July 1, 2003

---

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A method for identifying an individual exhibiting symptoms of a muscular dystrophy as an individual suffering from scapuloperoneal muscular dystrophy, said method comprising the steps of:
  - (a) obtaining a muscle tissue sample from an individual exhibiting symptoms of a dystrophy, wherein said individual is at least teen-aged and wherein said symptoms affecting the muscles of the shoulder girdle and peroneal, wherein said tissue sample is obtained from a tissue known in a normal individual to express  $\alpha 7\beta 1$   $\alpha 7A$  integrin;
  - (b) detecting a transcription product of an  $\alpha 7\beta 1$   $\alpha 7A$  integrin gene using hybridization or reverse transcriptase-polymerase chain reaction or a translation product of an  $\alpha 7\beta 1$   $\alpha 7A$  integrin gene using a detectable antibody specific for  $\alpha 7A$  integrin in said tissue sample;
  - (c) determining a level of the transcription or translation product of the  $\alpha 7\beta 1$   $\alpha 7A$  integrin gene in said tissue sample as compared with a level of the transcription or translation product of the integrin gene in a tissue sample from the same tissue of a normal individual, whereby ;
  - (d) diagnosing scapuloperoneal muscular dystrophy is diagnosed when the tissue sample of an individual exhibiting muscular dystrophy symptoms comprises a level of a transcription or translation product of the  $\alpha 7\beta 1$   $\alpha 7A$  integrin gene in said

Application No. 10/081,885  
Amendment dated November 3, 2003  
Reply to Office Action of July 1, 2003

---

tissue sample which is lower than the level in a tissue sample from the same tissue of a normal individual.

2. (Currently amended) The method of claim 1 wherein the translation product of an  $\alpha 7 \beta 1$   $\alpha 7 A$  integrin gene in said tissue sample is detected by contacting the tissue sample using an  $\alpha 7 \beta 1$   $\alpha 7 A$  integrin-specific antibody.
3. (Currently amended) The method of claim 2 wherein the  $\alpha 7 \beta 1$   $\alpha 7 A$  integrin-specific antibody is detectably labeled.
4. (Currently amended, withdrawn) The method of claim 1 wherein a transcription product of an  $\alpha 7 \beta 1$   $\alpha 7 A$  integrin gene is detected in the tissue sample.
5. (Withdrawn) The method of claim 4 where the transcription product is detected using reverse transcriptase-polymerase chain reaction.
6. (Withdrawn) The method of claim 5 wherein the primers used in the reverse transcriptase polymerase chain reaction comprise the nucleotide sequences of SEQ ID NO:4 and SEQ ID NO:5.
- 7-23. Canceled without prejudice.
24. (New) The method of claim 1 further comprising the step of detecting a transcription product of a laminin gene by hybridization or reverse transcriptase polymerase chain reaction or a translation product of a laminin gene using a detectable laminin-specific

Application No. 10/081,885  
Amendment dated November 3, 2003  
Reply to Office Action of July 1, 2003

---

antibody, whereby scapuloperoneal muscular dystrophy is diagnosed when laminin expression is normal and  $\alpha 7A$  integrin expression is reduced in the muscle tissue sample.